Lista 11 sobota, 13 maja 2023 Rrut: toler P (probertolone 20 danie 2 (in our) re P2=P (g,h)= 1/2 / g(x) bn(x) dx Rrut prostopodly. P(3) I (3-P(3)) (2-P(3)) (2-P) =0(2)(2,3) = 1 P(3) Boro prest rein vielomouóu stophia $\leq 2: \left(\times^2, \times, \Lambda \right)$ moriem ortogarden: bolary prosen $\frac{1}{(\sqrt{1/1})^{1}} = \frac{1}{1} = 1$ $\frac{1}{(\sqrt{1/1$ ortogouslue, altingosu' 1 M = [M1] M21 ... [Mn] do (Mi, M;)=0 do i+j (Mi, Mi)=1 $\sigma_{z} = \frac{\vec{x}}{\|\vec{x}\|} = 3\vec{x}$ $\langle 1, x^{2} \rangle = \langle x, x \rangle = \frac{1}{3}$ Nortopodie 2 Cembr 12.5 Mortagendue (5) MT: M-1 $U_3 = x^2 - (1_1 x^2) \cdot 1 - (x_1 x^2) \cdot x = x^2 - \frac{7}{3}$ $(x_1 x^2) = \frac{1}{2} \int_{-1}^{1} x^3 = \frac{1}{2} \frac{x^4}{4} \Big|_{-1}^{1} = 0$ pergréssie policy 200laine 1 W podragunopouro => (WEW 6> U = X W) $\frac{x^{2} - \frac{1}{3}}{\left(\left(x^{2} - \frac{1}{3}\right)\right)} = \frac{45}{9} \times \left(x^{2} - \frac{1}{3}\right) = \frac{1}{2} \left(x^{2$ P 7 1 3- P3 (PJ 3-P3 -04) - hera: $\left(1,3^{\frac{2}{3}},\frac{4^{\frac{5}{4}}}{4}\times^{2}-\frac{15}{4}\right)$ = $\frac{1}{5}\cdot\frac{1}{3}=\frac{3}{45}\cdot\frac{5}{45}$ (ZE, ŚĆ II $P(x^3) = 1 \langle 1, x^3 \rangle + 3 \times \langle 3 \times, x^3 \rangle + \left(\frac{45}{4} x^2 \langle \frac{45}{4} x^2, x^3 \rangle - \frac{15}{4} \langle \frac{15}{4}, x^3 \rangle \right) =$ $= 0 + 3 \times \cdot \frac{1}{2} \int_{3}^{3} x^{4} dx + (0 - 0) = 3 \times \cdot \frac{1}{2} \cdot \frac{3 \times 5}{5} \Big|_{1}^{1} = 3 \times \cdot \frac{3}{5} = \frac{5}{5} \times \Big|_{2}^{3}$ (P3 / 75) = (~ \vec{v}_0, \vec{v}_0) = \vec{v}_0, $P(x^3 - x^2 + x - 1) = P(x^3) - P(x^2) + P(x) - P(1) = \frac{6}{5} \times -x^2 + x - 1 = -x^2 + \frac{15}{5} \times -1$ 2 WIKIPEDII: Jesti un..., un jest borg Aonomo-SUPU? 117 = SOPEXPG:> = SOPG, bix = SZ: < bi, 000 lug podpuestnemill, a mourier A - Juntuz I... Junt to moeien ruba proxopodlego to P = A A* i many, re P(.) = Ju: (u:,) 20 donne 3, NIE ROBIE, 20donie 4. Po 1 3-Po (2) (R3, P3) = (P33) 11 P/3 11 = (P3) 3 20danie 4. orto
normalul Borne V: 61,..., 6416411..., 64 20 danie 1 Wjest jedos cycnorone, vier ist nige nelutor to 5 = 5 2; Gi liting jest berg ortonormoly U.

P(3) = \$\vec{w}\$\langle \vec{w}\$, \$\vec{v}\$\rangle\$ $P(\vec{\sigma}) = \begin{cases} b_i \langle b_{i1} \vec{\sigma} \rangle \\ = 0 \text{ ollow } \vec{\sigma} \end{cases}$ $\begin{cases} = 0 \text{ ollow } \vec{\sigma} \end{cases}$ $\begin{cases} = 1 \text{ ollow } \vec{\sigma} \end{cases}$ $\langle b_{i1} \vec{\sigma} \rangle = \langle b_{i1} \vec{\sigma} \rangle = \langle b_{i2} \vec{\sigma} \rangle = \langle b_{i1} \vec{\sigma} \rangle = \langle b_{i2} \vec{\sigma} \rangle = \langle b_{i1} \vec{\sigma} \rangle = \langle b_{i2} \vec{\sigma} \rangle = \langle b_{i1} \vec{\sigma} \rangle = \langle b_{i2} \vec{\sigma} \rangle = \langle b_{i1} \vec{\sigma} \rangle = \langle b_{i2} \vec{\sigma} \rangle = \langle b_{i2} \vec{\sigma} \rangle = \langle b_{i1} \vec{\sigma} \rangle = \langle b_{i2} \vec{\sigma} \rangle = \langle b_{i2}$ Styd P(bi)= 3(Gi, 3) 11 Puill= 11 3 < 6; 3>1 = < 6; 3> 11 311 2 (Puil = 5 (1) 21 (Fi, 3) = (1) (1) 2(6; 3) = 5(6; 3) P(0) = 5 (6; (6; 0) = 5 x; 6; S/ (U; w) = |(WB)|2 = || w|1 = 1 I norme me rolery od bory, mec Hirl = Hirles 11 Poll = 11 Poll B = 5 (Ki) Lodanie 5. / Shalor (veung Tuiss) ale to vie jest istolne) | 3 | = | 3 | | = | 5 (di) = | 5 (di) + 5 (di) | B-ortonorneflizaga b-5 bærg A $(\sigma_i)_{\mathcal{B}} = \alpha_i \quad ((\sigma_i)_{\mathcal{A}} - \sum_{x < i} ((\sigma_i)_{\mathcal{A}} (\sigma_i)_{\mathcal{B}})(\sigma_x)_{\mathcal{B}})$ $= \sum_{x < i} ((\sigma_i)_{\mathcal{A}} (\sigma_i)_{\mathcal{A}} (\sigma_i)_{\mathcal{B}})(\sigma_x)_{\mathcal{B}}$ $\langle E \rangle \langle v_i \rangle_B = \lambda_i \langle (v_i)_A - \sum_{i} \beta_{i} \langle v_{i} \rangle_B \rangle$ Trometria: pelitabotain F tolio, re (Fo, Fo) = (a, a) indulyjnie: (vi) B= S Xx (vx) 4
Niech Xx(x46)=0 || F3|| = |(Z|| $(\upsilon_i)_B = \lambda_i (\upsilon_i)_A - \sum_{x \leq i} \beta_x \sum_{z \leq x} (\upsilon_z)_A =$ Ledonie 6. Symetine orgløden podprestnen: () roundere wordined us he precious V= W1+ W2 volie, ie W1 n W1 = \$ to = L; (vi) A - 5 5 Bx xxz (vz) A - L; (vi) A - 5 Cuz) S Bx xxz = $\vec{G} = \vec{\omega}_1 + \vec{\omega}_2 \implies \vec{F} (\vec{G}) = \vec{\omega}_1 - \vec{\omega}_2$ 20d. 6. hours wersju | Fu? | = | Fu | | = 5 x; 2 + (- xx) 2 = 5 x; 2 e) Prosto: pest neu W (to jest rut no is, $= \chi_{i}(v_{i})_{A} - \sum_{i=1}^{i-1} (v_{x})_{A} \chi_{x} = \sum_{i=1}^{i} (v_{x})_{A} \chi_{i}$ a) Moein obreter o legt: ~ wellter o ottogosii 1 z W (1,0) -> (cosd, sind) (0,1) -> (-sind, cosd) Steed (vi) B= S (vx) A Li vry li mouien Wz- ortonormolny z W' ("reszty", czyli W'+ W= R2 over W'n W=\$ MBA jest govustor jlegtine. Sked MAB= MBA Ter ぴ = ひょ + ぴっ $P(\vec{v}) = \vec{\omega}_{n}$ $S(\vec{s}) = \vec{\omega}_1 - \vec{\omega}_2$ Ledonie 7. | 3 | = (\vartuz , \vartuz , \vartuz) = (\wanter \alpha_1 \wartuz) + \langle \wartuz) | M v | = (Mo) 2 + (Mo) 2 - (cosd o, - sind oz) + (sind o, + cosd oz) = 1 F 2 1 5 1 2 = cos 2012-2 sindered 0102+ sing 02+ sing 102+ Landers 2010 1 + cos 202 = 01+02 116011=1101 ||GFZ||=||GZ||=||Z||=||FZ||=||Z|| $||\vec{v}|| = v_1^2 + v_2^2$ (Dy & L Libi c) squetoia (V=W,+Wz, wigleslem W1) $\|\vec{v}\| = \sqrt{\vec{\sigma}, \vec{\sigma}} = \sqrt{(\omega_1 + \omega_2, \omega_1 + \omega_2)} = \sqrt{(\omega_1, \omega_1)} + 2(\omega_1, \omega_2) + 2(\omega_2, \omega_1)$ 200laire 8 | φ(v) | = ··· = (ω, ω, ω, ω, ω) = (ω, ω, -2(ω, ω,) -(ω, ω,) o) Jesti M ortogonolne to det (M): 1 Dien, le dim(W1)+ dim(W2)=dim(V1) i vienn, re (W1, W2)= (W1, W2)B. John preditering je v borie to Mortogonolue (=) M-1 = MT, viec Leolonie 3. show M ortogonal me to V M ortogonoline (=> M -1 = M T V M. M = M. M-1=100 det (id) = 1, roten $A^{-1} = A^{T}, B^{-1} = B^{T}$ a) (AB) = BTAT = B1A-1 = (AB)-1
listed olet (M·MT)=1 (=> olet (M). olet (MT)=1(=> (=> (det (M))2 = 1 (=> olet (M) = ±1 $(J)(A^{T})^{-1} = (A^{-1})^{T} = (A^{T})^{T} \Rightarrow A^{T} \text{ ortogonal in}$ liste 5 c) A-1 = AT : AT entrogenalme h (x-7) = 1+3(x-8) 4x-28=1+3x-24 /+28-3x Mouer dodotino destous: 1) synetry crun x = 5 2) 43 + 0 3 M 0 > 0 Ladoure 11. 7 - worksti wtorm M dodatnio dreslarej 0 - welder wtorm dlo 2 0 - M 3 >0 M3 = 23 $(\vec{\sigma}^{\mathsf{T}})(\lambda\vec{\sigma}) : \lambda(\vec{\sigma}^{\mathsf{T}}\vec{\sigma}) : \lambda(\vec{\sigma$ JT MJ>0 250; >0 2>00 (01+0,040)+(w,w) (0',0,0') (0',0) (0,0) (0'+0,0')-(0'+0,0) a, G, c - weltony (a, 6+c) = (a,6)+(a,c) $\langle (\sigma' + \omega, \sigma' + \omega) \cdot (\sigma, \sigma) \rangle$ (a, x.0) = x (a, b) (1, 0) = Suivi (/ ut (/= \square \cdot 1011 = 15 vi2